

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-PR1-050U-050D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

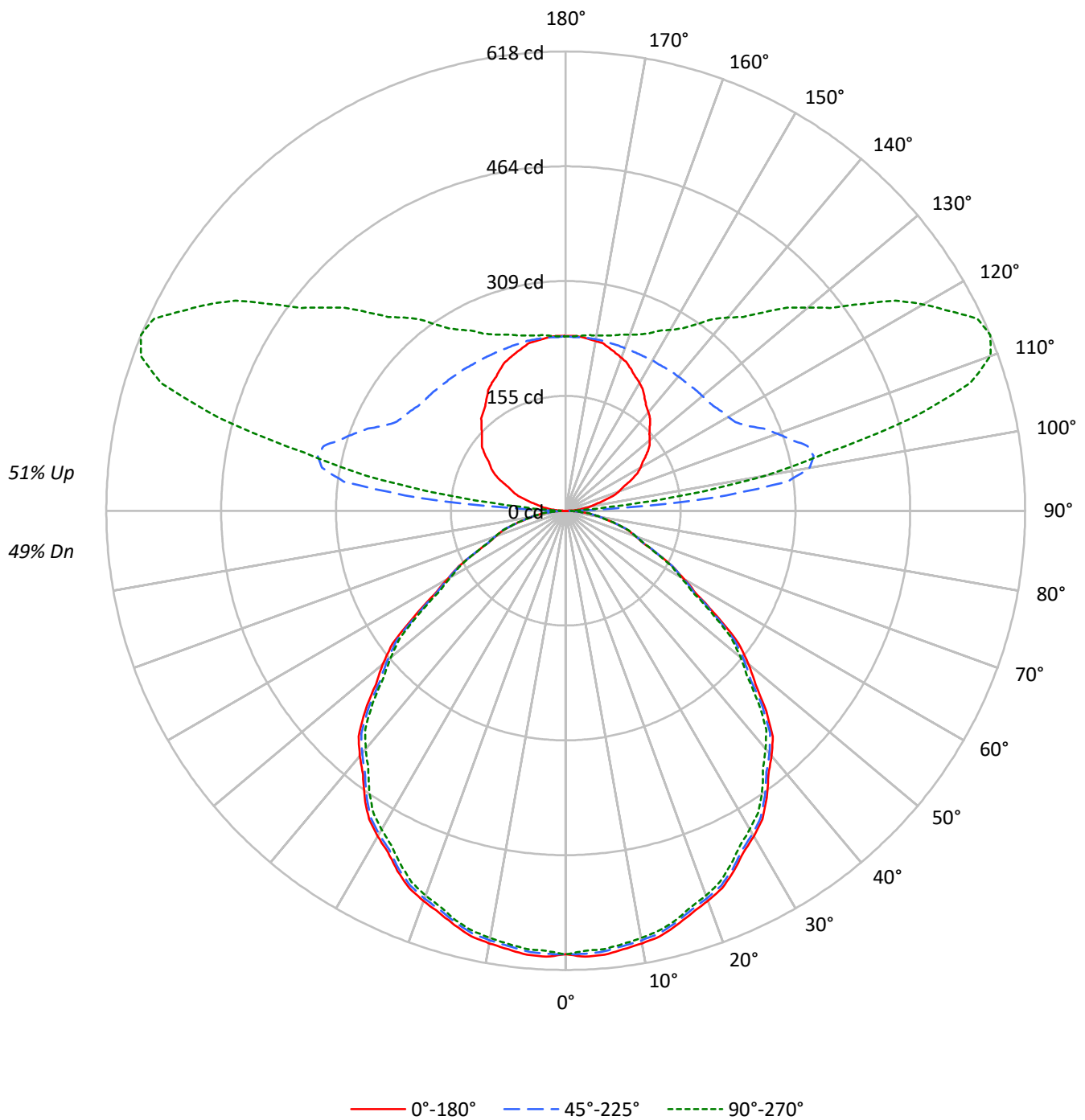
Lumens per Lamp: N/A
Luminaire Lumens: 3026.8 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5556	5513	5485
10°	5539	5500	5471
15°	5514	5480	5450
20°	5486	5451	5411
25°	5448	5412	5349
30°	5390	5351	5275
35°	5309	5263	5188
40°	5189	5133	5040
45°	4978	4890	4790
50°	4605	4494	4405
55°	4018	3928	3846
60°	3386	3358	3292
65°	2930	2941	2919
70°	2689	2703	2703
75°	2584	2584	2602
80°	2433	2460	2433
85°	1958	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.9
10°-20°	161.5	5.3
20°-30°	243.6	8.0
30°-40°	290.2	9.6
40°-50°	286.1	9.5
50°-60°	218.7	7.2
60°-70°	135.3	4.5
70°-80°	76.9	2.5
80°-90°	24.3	0.8
90°-100°	112.8	3.7
100°-110°	306.3	10.1
110°-120°	315.0	10.4
120°-130°	251.8	8.3
130°-140°	197.9	6.5
140°-150°	151.7	5.0
150°-160°	109.1	3.6
160°-170°	66.7	2.2
170°-180°	22.5	0.7
0°-30°	461.5	15.2
0°-40°	751.7	24.8
0°-60°	1256.5	41.5
0°-90°	1493.0	49.3
90°-120°	734.1	24.3
90°-150°	1335.5	44.1
90°-180°	1534.0	50.7
0°-180°	3026.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	600	593	595	593	592	57
15°	577	571	574	572	571	163
25°	535	529	532	526	525	246
35°	471	466	467	461	461	294
45°	382	376	375	368	367	292
55°	250	246	244	240	239	224
65°	134	133	135	134	134	136
75°	72	72	72	73	73	77
85°	18	20	21	21	21	22
90°	1	3	5	7	7	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.9	596.9	596.9	596.9	596.9
2.5°	600.6	595.3	596.9	595.6	592.7
5°	599.9	593.4	595.3	593.2	592.2
7.5°	595.3	588.9	590.8	588.7	588.1
10°	591.2	585.2	587.1	585.0	584.0
12.5°	586.7	580.2	582.6	580.1	579.1
15°	577.3	571.3	573.7	571.6	570.6
17.5°	567.0	560.6	563.0	560.6	559.3
20°	558.8	552.8	555.2	551.6	551.1
22.5°	549.8	543.7	546.2	541.3	541.2
25°	535.2	528.6	531.6	525.9	525.4
27.5°	517.8	511.8	514.2	508.4	507.8
30°	505.9	499.8	502.3	496.1	495.1
32.5°	492.3	486.7	488.7	482.5	481.9
35°	471.4	465.9	467.3	461.1	460.6
37.5°	447.7	442.6	443.5	436.7	436.2
40°	430.8	425.8	426.2	419.0	418.5
42.5°	412.3	407.3	406.8	399.6	399.1
45°	381.5	376.4	374.8	368.1	367.1
47.5°	346.3	341.3	338.2	332.7	332.0
50°	320.8	315.8	313.1	308.4	306.9
52.5°	293.2	288.2	285.9	281.7	280.2
55°	249.8	245.8	244.2	240.1	239.1
57.5°	208.6	205.9	205.4	201.4	201.0
60°	183.5	182.0	182.0	178.4	178.4
62.5°	162.1	161.0	161.8	159.5	159.1
65°	134.2	133.2	134.7	133.7	133.7
67.5°	112.1	112.1	113.0	112.6	112.6
70°	99.7	99.7	100.2	100.2	100.2
72.5°	88.6	88.2	89.6	89.5	89.1
75°	72.5	72.5	72.5	73.0	73.0
77.5°	56.4	56.5	57.0	56.8	56.4
80°	45.8	46.3	46.3	45.8	45.8
82.5°	35.1	35.6	35.6	35.5	35.1
85°	18.5	19.5	20.6	20.6	20.6
87.5°	5.5	7.5	9.3	9.6	9.2
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)